

P. O. Box 232
Kerrville, Texas

July 6, 1951

To: E. F. Knipling, In Charge, Division of Insects
Affecting Man and Animals

From: C. L. Smith, Acting in Charge, Kerrville, Texas

Subject: Big Stinky Fly Traps and Tifa Fog Applicator

Transmitted herewith are reports relative to the above subjects.

Enclosures 8

CLSmith:ecg

P. O. Box 332
Kerrville, Texas

July 6, 1932

To: E. F. Whiting, in Charge, Division of Insects
Affecting Man and Animals
From: C. L. Smith, Acting in Charge, Kerrville, Texas
Subject: Big Stinky Fly Traps and Tills For Application

Transmitted herewith are reports relative to the above subjects.

Enclosures 3

Classified

July 6, 1951

BIG STINKY FLY TRAPS
H. M. Brundrett

The purpose of these studies was to determine the efficiency of "Big Stinky" fly traps and with this in mind tests were conducted, comparing these traps with the government standard fly trap.

The first comparative test was initiated late in 1950 and because of the onset of cool weather later tests were conducted in 1951. In 1950 four big stinky traps were set in operation according to directions. Two were baited with beef liver and two with lean beef. The government standard trap was baited with beef liver. During the trapping period, October 30 to November 30, the big stinky traps caught but a handful of flies each, while the standard trap caught 15 pints.

In a second test conducted from May 4 to June 1, 1951, only two big stinky traps were compared to the government standard trap. These were one gallon capacity and one-half gallon capacity. One each of these traps and the standard trap were set near the station stock barns and operated according to directions for four weeks. Water was added as needed and the baits stirred. During this period the fly catch is tabulated below:

Trap #	Bait	Flies taken	
		Group	Quarts
1. "Big Stinky" (small)	$\frac{1}{2}$ lb. beef liver + $\frac{1}{2}$ pt. water	180	1.5
2. "Big Stinky" (large)	$\frac{1}{2}$ lb. lean beef + $\frac{1}{2}$ pt. water	60	1.0
3. Gov't. standard	2 lb. beef liver + 4 qt. water	1370	24

This test showed again the greater efficiency of the standard trap in taking 16 times as many flies, 3 pints to 48 pints, and twice as many for the same amount of bait, 3 pints to 6 pints per $\frac{1}{2}$ pound of bait.

July 6, 1951

THE EFFICIENCY OF THE STANDARD TRAP

The purpose of these studies was to determine the efficiency of the
"standard" fly traps and with this in mind tests were conducted, comparing
them with the government standard fly trap.

The first comparative test was conducted in 1950 and because of
the onset of bad weather fewer traps were conducted in 1951. In 1950
four big sticky traps were set in operation according to directions. Two
were baited with beef liver and two with bean meal. The government standard
trap was baited with beef liver. During the trapping period, October
20 to November 20, the big sticky traps caught two a handful of flies
each, while the standard trap caught 15 flies.

In a second test conducted from May 4 to June 1, 1951, only two big
sticky traps were compared to the government standard trap. These were
one gallon capacity and one-half gallon capacity. One each of these
traps and the standard trap were set near the station stock house and
operated according to directions for four weeks. Later was added in
beef and the better attracted. During this period the fly catch in

included below:

Table 1			
Trap	Capacity	Bait	Catch
1.	1 gallon	1 lb. beef liver + 1/2 lb. water	150
2.	1/2 gallon	1 lb. bean meal + 1/2 lb. water	60
3.	1 gallon	2 lb. beef liver + 1 lb. water	120

This test showed again the greater efficiency of the standard trap in
killing 15 times as many flies, 3 times as 45 flies, and twice as many for
the same amount of bait, 3 times as 9 flies per 1/2 pound of bait.

A third test was conducted from June 1 to June 29 using the same traps and procedure as was used in test number 2. During this period the fly catch is tabulated below:

Trap #	Bait	Flies taken	
		Total catch	Per lb. bait
1. "Big Stinky" (small)	$\frac{1}{2}$ lb. beef liver + $\frac{1}{2}$ pt. water	1 qt.	4 qts.
2. "Big Stinky" (large)	$\frac{1}{2}$ lb. lean beef + $\frac{1}{2}$ pt. water	2.5 qt.	10 "
3. Gov't. standard	2 lb. beef liver + 4 qt. water	19 qt.	9.5 "

*Due to the large number of dermestid beetles in this trap it is estimated that a total of four quarts of flies were destroyed. The flies destroyed are not considered in the above tabulation.

A third test was conducted June 10 to June 12 using the same

apparatus and procedure as was used in test number 2. During this period

the test was continued for:

Time		Time		Time	
1. 10.00	10.00	10.00	10.00	10.00	10.00
2. 10.00	10.00	10.00	10.00	10.00	10.00
3. 10.00	10.00	10.00	10.00	10.00	10.00
4. 10.00	10.00	10.00	10.00	10.00	10.00
5. 10.00	10.00	10.00	10.00	10.00	10.00
6. 10.00	10.00	10.00	10.00	10.00	10.00
7. 10.00	10.00	10.00	10.00	10.00	10.00
8. 10.00	10.00	10.00	10.00	10.00	10.00
9. 10.00	10.00	10.00	10.00	10.00	10.00
10. 10.00	10.00	10.00	10.00	10.00	10.00

The test was continued for a period of 10 minutes in this test to be completed

and a total of 100 grams of liquid was collected. The liquid collected

was not contained in the above table.